

Appeal from a decision of the Utah State Office, Bureau of Land Management, upholding a prior decision finding that drainage had occurred from lands within oil and gas lease U-37688, and providing for the assessment of compensatory royalties.

Set aside and remanded.

1. Oil and Gas Leases: Compensatory Royalty--Oil and Gas Leases:  
Drainage

Compensatory royalties accrue after the passage of a reasonable time following the date the lessee knew or should have known that drainage was occurring. In a common lessee context, the lessee who drills the offending well is in the best position to know that drainage is occurring. In such case BLM need not assume the initial burden of showing that the lessee knew or that a reasonably prudent operator should have known that drainage was occurring, as the common lessee is presumed to have knowledge of the drainage upon first production from its offending well. This presumption is rebuttable by the common lessee, who bears the ultimate burden of persuasion as to date he had notice that drainage was occurring.

2. Oil and Gas Leases: Compensatory Royalty--Oil and Gas Leases:  
Drainage

Under the usual statement of the standard for prudent operation, the lessee is not obligated to drill an offset well unless there is a sufficient quantity of oil or gas to pay a reasonable profit to the lessee over and above the cost of drilling and operating the well. The prudent operator standard applies to situations in which a leased Federal tract is being drained by a well operated by a common lessee. In such cases, BLM has the burden of establishing that the leased Federal tract is being drained by the common lessee's non-Federal well,

but need not prove as a part of its cause of action that a protective well would be economic. The burden of producing evidence and the ultimate burden of persuasion on this issue rest with the common lessee.

3. Oil and Gas Leases: Compensatory Royalty--Oil and Gas Leases: Drainage

No breach of a lessee's duty to prevent drainage will occur if the cost of drilling and operating an offset well is greater than the value of the recovered oil and/or gas. However, if a lessee can make a reasonable profit by drilling the well, he has a duty to prevent drainage by either drilling a well or unitizing the drained area. The prudent operator test is applied looking to the reasonably anticipatable recovery from the offset well, rather than the oil and/or gas which would be lost if the well were not drilled.

APPEARANCES: John R. Little, Jr., Esq., and Charles F. Holum, Esq., Denver, Colorado, for appellant; David K. Grayson, Esq., Office of the Regional Solicitor, Salt Lake City, Utah, for the Bureau of Land Management.

OPINION BY ADMINISTRATIVE JUDGE MULLEN

Cordillera Corporation (Cordillera) has appealed from a February 4, 1988, decision of the Utah State Office, Bureau of Land Management (BLM), upholding a prior decision that drainage had occurred from land within Federal oil and gas lease U-37688, and providing for the assessment of compensatory royalties.

Cordillera holds Federal oil and gas lease U-37688, issued effective August 1, 1977, which embraces 120 acres in the SE 1/4 SE 1/4, sec. 17, and the E 1/2 NE 1/4, sec. 20, T. 30 S., R. 25 E., Salt Lake Meridian, San Juan County, Utah. It also holds a State oil and gas lease covering sec. 16, which is adjacent to and east of lease U-37688. On September 5, 1978, Cordillera completed the Cordillera State No. 1 well in the SW 1/4 SW 1/4, sec. 16.

By letter dated July 8, 1987, the Chief, Branch of Fluid Minerals, BLM, notified appellant that the SE 1/4 SE 1/4, sec. 17 was subject to possible drainage by the Cordillera State No. 1 well. He stated that Cordillera would be expected to drill a protective well on the Federal lease unless it could demonstrate with detailed engineering, geologic, and economic data that no drainage was occurring or that a protective well would have little or no chance of encountering oil and gas in quantities sufficient to pay the cost of drilling and operating the well. The letter further indicated that compensatory royalties would be assessed, based upon the value of the drained oil and/or gas, if Cordillera did not demonstrate the nonexistence of drainage from under its Federal lease, and that such royalties would be assessed commencing 3 months after the date of first production from the offending Cordillera State No. 1 well until a protective well commences production, or the offending well ceases production, whichever occurs first.

In response to this and subsequent BLM letters, Cordillera submitted a drainage analysis of the Cordillera State No. 1 well prepared by William Abbott, an engineering consultant, and additional detailed explanations and information. Abbott's report concluded that at most only 39 acres were being drained by the well, and little, if any, of that drainage was from the Federal lease. Abbott based his conclusion in part on his determination that the thickness of the net pay encountered in the Cordillera State No. 1 well was at least 139 feet, rather than the approximately 92 feet of net pay calculated by BLM. Abbott also opined that drilling a protective well on the Federal lease would be too risky for a prudent operator.

In his November 16, 1987, decision, the Chief, Branch of Fluid Minerals, held that drainage of lease U-37688 was occurring as a result of the production from the Cordillera State No. 1 well, and that 19 percent of the offending well's total production was attributable to lease U-37688. He noted that "the lease terms and the oil and gas operating regulations require that compensatory royalty be paid for drainage that has or is occurring from a Federal lease." The decision also informed Cordillera of its right to seek State Director review of this determination.

By letter dated December 15, 1987, appellant sought a technical and procedural review of the decision of the Chief, Branch of Fluid Minerals, and an opportunity to make an oral presentation before the State Director. The oral presentation occurred on January 21, 1988. In its oral and written presentation, Cordillera argued that its calculation of 139 feet of net pay was accurate, and provided substantiation for this determination. It also questioned BLM's policy regarding assessing compensatory royalties for drainage by a common lessee.

On February 4, 1988, the State Director issued his decision. He first explained BLM's policy concerning drainage by a common lessee:

[BLM] policy is, concerning your particular situation, contained in Drainage Protection Manual 3160-2 chapter .11D. This policy is as follows: "The prudent operator rule does not apply to those situations where the lessee of the drained land is the operator of the offending well." The prudent operator rule states that an operator does not have to drill a well unless it can be demonstrated that a well drilled will pay for its cost of drilling, completion and a profit. This however, does not apply to the common ownership case where the lessee of the drained land is the operator of the offending well. Therefore, compensatory royalty is to be assessed from the date of completion of the offending well.

On the issue of drainage from the Federal lease, the State Director stated:

There is a disagreement between BLM and Cordillera on the extent of the area being drained. This was tied directly to our differing interpretation of the available technical data. The BLM assessment of the drainage factor is 19 percent. Although

it is recognized that there are divergent views on interpretation of data, it was not conclusively demonstrated that the interpretation of the BLM was not correct. Therefore, it is the decision to uphold the previously specified drainage factor of 19 percent and that assessment of compensatory royalty in that amount will occur.

In its statement of reasons for appeal, Cordillera argues that BLM's decision is legally erroneous because BLM cannot assess compensatory royalties until a reasonable time after BLM gives notice of the alleged drainage. Based upon this premise, Cordillera notes that BLM did not give notice of the alleged drainage until July 1987, and therefore royalties would not accrue until the passage of a reasonable time after July 1987. Cordillera contends that BLM's failure to notify it of possible drainage before July 1987 precludes the assessment of compensatory royalties, because it was not producing any hydrocarbons after that date.

Cordillera also asserts that BLM's decision is wrong on the facts because no drainage has occurred from lease U-37688, and because a prudent operator would not drill a protective well on that lease. The dispute over the existence of drainage centers on the thickness of the net pay. Cordillera supports its calculation of net pay with further submissions by Abbott, explaining why his reliance on the sonic log to measure porosity, and his utilization of the actual lithology and related rock properties (taken directly from the geologist's sample analysis obtained during drilling) are analytically superior to the sonic-neutron log cross-plot technique used by BLM to simultaneously determine porosity and lithology.

Cordillera further contends that BLM misstated the burden of proof when it rejected its analysis and found that Cordillera had "not conclusively demonstrated" that BLM's interpretation was not correct. Cordillera contends that it need only prove its case by a preponderance of the evidence. Additionally, it argues that the graphic method of drainage calculation described in the BLM Drainage Manual (which relies on applicable well-spacing requirements) supports the Cordillera conclusion that no drainage has occurred from lease U-37688.

Cordillera also contends that a prudent operator would not have drilled a protective well on the Federal lease. It argues that the costs associated with the drilling and completing a protective well would have far exceeded any income produced by the well, even assuming BLM's calculation of drainage was accurate. Cordillera further asserts that, given the existing knowledge of the oil and gas reserves in the area, as a matter of common business sense, no prudent operator would have drilled an offset well on lease U-37688. Cordillera challenges BLM's policy that the prudent operator standard does not apply to a common lessee, arguing that the rationale for the rule applies equally to a common lessee. Finally, Cordillera seeks a hearing before an Administrative Law Judge on the factual issues of whether drainage occurred, and whether a prudent operator would have drilled an offset well, in the event that the Board determines

that BLM's failure to give a timely notice of drainage does not bar the recovery of compensatory royalties.

In its answer, BLM counters that it is entitled to collect compensatory royalties for the 10 years of drainage from lease U-37688 because BLM policy does not permit it to forego compensatory royalties accruing prior to its giving notice that drainage is occurring when it has identified a drainage case more than 1 year after completion of the offending well. BLM also contends that it properly refused to recognize the prudent operator rule because Cordillera is the lessee of the tract being drained and the operator of the offending well.

BLM also maintains that its calculations of the net pay thickness and the drainage area are correct, thus entitling it to compensatory royalties. BLM explains why it believes its methodology produced an accurate picture of the porosity and lithology of the Cordillera State No. 1 well, and criticizes Cordillera's techniques, identifying what it believes to be problems and inconsistencies in Cordillera's analysis. Discounting the relevancy of the applicable well-spacing rules mentioned by Cordillera, BLM argues that it has demonstrated the accuracy of its calculation of the net pay thickness, and that the drainage factor of 19 percent is correct.

In a short reply, Cordillera reemphasizes its disagreement with BLM's technical and factual evaluations, submits an additional affidavit by Abbott to refute BLM's criticisms of its analysis and further explain the basis for his calculation of the net pay thickness, and renews its request for a hearing.

[1] The applicable regulations governing drainage and compensatory royalty, 43 CFR 3100.2-2 and 43 CFR 3162.2(a), provide in part, respectively:

Where lands in any leases are being drained of their oil or gas content by wells either on a Federal lease issued at a lower rate of royalty or on non-Federal lands, the lessee shall both drill and produce all wells necessary to protect the leased lands from drainage. In lieu of drilling necessary wells, the lessee may, with the consent of the authorized officer, pay compensatory royalty in the amount determined in accordance with 30 CFR 221.21.

(a) The lessee shall drill diligently and produce continuously from such wells as are necessary to protect the lessor from loss of royalty by reason of drainage. The authorized officer may assess compensatory royalty under which the lessee will pay a sum determined as adequate to compensate the lessor for the lessee's failure to drill and produce wells required to protect the lessor from loss through drainage by wells on adjacent lands.

In Atlantic Richfield Co., 105 IBLA 218, 95 I.D. 235 (1988), and Atlantic Richfield Company (On Reconsideration), 110 IBLA 200, I.D. (1989), this Board considered the drainage issue in the context of the common lessee. In our initial decision we discussed the principle that

compensatory royalties commence upon the passage of a reasonable time following notice to the lessee that drainage is occurring. We held:

In a common lessee context, the lessee who drills the offending well is in the best position to know that drainage is occurring. In such context, we find no reason for requiring BLM to assume the initial burden of going forward with evidence that the common lessee knew or that a reasonably prudent operator should have known that drainage was occurring. See Elliott v. Pure Oil Co., [10 Ill.2d 146, 139 N.E.2d 295 (1956)]. The common lessee shall be presumed to have knowledge of the drainage upon first production from its offending well. However, this presumption is rebuttable by the common lessee, who bears the ultimate burden of persuasion as to notice of drainage.

Id. at 226, 95 I.D. at 240. Thus, contrary to Cordillera's assertion, BLM is not barred from assessing compensatory royalties by its failure to notify Cordillera of the possible drainage before July 1987.

[2] Under the usual statement of the prudent operator rule, even if drainage is occurring, the lessee is not required to drill an offset well unless there is a sufficient quantity of oil or gas to pay a reasonable profit to the lessee over and above the cost of drilling the well. Nola Grace Ptasynski, 63 IBLA 240, 247, 89 I.D. 208, 212 (1982).

In Atlantic Richfield Co., supra at 224-25, 226, 95 I.D. at 239, 240, we determined that the prudent operator standard applies to situations in which a leased Federal tract is being drained by a well operated by a common lessee. <sup>1/</sup> In that case, we refined our prior determination of the proper burdens of proof in the common lessee context. In common lessee cases, although BLM has the burden of establishing that the leased Federal tract is being drained by the common lessee's non-Federal well, it need not prove as a part of its cause of action that a protective well would be economic. In common lessee cases the burden of producing evidence and the ultimate burden of persuasion on this issue rest with the common lessee. Id. at 225, 95 I.D. at 239.

[3] In Atlantic Richfield Co., supra, we also discussed the appropriate test of prudent operation to be applied in common lessee cases. We noted that, because the loss to the lessor is an economic loss, economics should govern the duty to drill. We held that if the cost of drilling and operating an offset well is greater than the value of the recovered oil

---

<sup>1/</sup> In Atlantic Richfield Company (On Reconsideration), supra, we specifically addressed the issue of the applicability of the prudent operator rule to drainage by a common lessee and found that the prudent operator rule limits the duty of a common lessee to protect Federal lands from drainage, i.e., a common lessee must pay compensatory royalty on oil and gas that it drained from a Federal lease only if the reserves recoverable by a protective well on the Federal lease are sufficient to pay a reasonable profit over and above the cost of drilling and operating the well.

and/or gas, there would be no breach of a lessee's duty to prevent drainage. However, if a lessee can make a reasonable profit by drilling the well, the common lessee has a duty to prevent drainage by either drilling a well or unitizing the drained area. We held that the prudent operator test is applied looking to the reasonably anticipatable recovery from the offset well, rather than the oil and/or gas which would be lost if the well were not drilled. Atlantic Richfield Co., *supra* at 226-27, 95 I.D. at 240-41.

These principles control the case before us. Accordingly, we find that we must set aside BLM's decision and remand the matter to BLM for further proceedings. BLM has the initial burden of establishing that drainage occurred from the Federal lease. To challenge BLM's drainage determination, appellant has the burden of showing error by a preponderance of the evidence. Bender v. Clark, 744 F.2d 1424 (10th Cir. 1984). In the case now before us the State Director, while recognizing that there were divergent views on the interpretation of the available technical data, improperly required appellant to "conclusively demonstrate that the interpretation of the BLM was not correct."

We recognize that there are significant factual disputes regarding the amount of the net pay and the acreage drained by the Cordillera State No. 1 well which could warrant referring the case for a hearing. See, e.g., Coleman Oil & Gas, Inc., 104 IBLA 363 (1988). However, because the State Director placed an inappropriate burden on appellant, we believe that, by allowing the opportunity to reassess the evidence and apply the proper burden of proof as an initial matter, the need for a hearing may be obviated.

Further, BLM erred when it refused to consider whether the prudent operator rule was applicable to this situation. Therefore, should BLM determine that drainage was occurring, Cordillera as a common lessee will have the burden of proving that it would have been uneconomic to drill an offset well on that lease at the time drainage commenced, if it cannot show by a preponderance of the evidence that a later date should be used. 2/ Cordillera should be afforded an opportunity to submit evidence in support of its position on these issues. BLM should then make its final determination of whether compensatory royalties are due based on its information and the evidence submitted by Cordillera. 3/ The decision should clearly set forth the methods and assumptions used as well as an explanation of

---

2/ This point in time is used because the drained oil and/or gas should be considered when making the determination. The lapse of a reasonable time after lessee's notice of drainage is measured in terms of how long it would take to complete the offset well. Therefore, the decision to drill must be based upon the anticipatable reserves when the obligation accrues, not when the well should have been completed.

3/ If, after review, it is determined that compensatory royalties are due, the applicability of the statute of limitations to all or a portion of those royalties should also be considered. See CSX Oil & Gas Corp., 104 IBLA 188, 95 I.D. 148 (1988).

the reasons for rejecting or discounting any of the evidence submitted by Cordillera. That determination will be appealable to this Board.

Therefore, pursuant to the authority delegated to the Board of Land Appeals by the Secretary of the Interior, 43 CFR 4.1, the decision appealed from is set aside and remanded.

---

R. W. Mullen  
Administrative Judge

I concur:

---

Gail M. Frazier  
Administrative Judge